

1 Claims:

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3 1 Apparatus for use in handling a load comprising
4 a load-bearing rope, a mechanism for paying out and
5 recovering the load-bearing rope, a service cable
6 and a service cable holder for holding the service
7 cable, a first wrapping device for rotating one of
8 the service cable and the load-bearing rope around
9 the other as they are payed out to wrap the two
10 together, and to unwrap them from one another as
11 they are recovered, a mechanism for holding and
12 paying out a securing member, and a second wrapping
13 device for wrapping the securing member around the
14 service cable and the load-bearing rope, and to
15 unwrap the securing member from the service cable
16 and load-bearing rope as either of them is
17 recovered.

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19 2 Apparatus as claimed in claim 1, wherein the
20 securing member is in the form of a planar strip,
21 tape or ribbon.

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23 3 Apparatus as claimed in any preceding claim,
24 wherein the securing member is resilient.

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26 4 Apparatus as claimed in any preceding claim,
27 wherein the securing member is tensioned as it is
28 applied to the rope.

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30 5 Apparatus as claimed in any preceding claim,
31 wherein the first wrapping device rotates a service

1 cable drum in a circular path around the axis of the
2 rope.

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4 6 Apparatus as claimed in any one of claims 1-4,
5 wherein the service cable is stored on a drum having
6 an axis that is co-axial with the axis of the rope
7 and wherein the service cable wrapping device
8 rotates around the drum to pay out the service
9 cable.

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11 7 Apparatus as claimed in any preceding claim,
12 wherein the securing member is stored on a securing
13 member drum and wherein the second wrapping device
14 rotates the securing member drum in a circular path
15 around the axis of the rope.

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17 8 Apparatus as claimed in one of claims 1-6,
18 wherein the securing member is stored on a drum that
19 has an axis which coincides with the axis of the
20 load-bearing rope, the securing member drum having a
21 central aperture through which the load-bearing rope
22 passes, and wherein the securing member passes over
23 a sheave which is mounted for movement in a circular
24 path around the axis of the load-bearing rope.

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26 9 Apparatus as claimed in any preceding claim,
27 wherein the second winding device is arranged to
28 discharge the securing member radially outward of
29 the service cable to wind the securing member around
30 the service cable and the load-bearing rope.

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1 10 Apparatus as claimed in any preceding claim,
2 wherein the securing member comprises an elastic
3 strip with a non-elastic reinforcing member to limit
4 the maximum extension of the securing member.

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6 11 Apparatus as claimed in any preceding claim,
7 wherein the securing member incorporates an adhesive
8 to hold the securing member to the rope and service
9 cable.

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11 12 Apparatus as claimed in any preceding claim,
12 wherein the wrapping devices are arranged to pay out
13 the service cable and/or the securing member close
14 to the axis of the rope.

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16 13 Apparatus as claimed in any preceding claim,
17 having more than one service cable wrapping device
18 to accommodate respective service cables and to wrap
19 them on to the rope.

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21 14 Apparatus as claimed in any preceding claim,
22 having guide means to guide the service cable(s),
23 the securing member and/or the rope, the guide means
24 comprising at least one roller or sheave.

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26 15 Apparatus as claimed in claim 14, wherein the
27 guide means comprises a roller cage provided around
28 the circumference of the securing member, the guide
29 means and/or the rope.

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31 16 A method for use in handling a load,
32 comprising:

1 paying out a load-bearing rope;
2 paying out a service cable;
3 wrapping one of the rope and the service cable
4 around the other as they are being paid out;
5 wrapping a securing member around the service cable
6 and load-bearing rope as they are being paid out;
7 and subsequently unwrapping the securing member and
8 service cable from the load-bearing rope as the
9 load-bearing rope is recovered.

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11 17 A method as claimed in claim 16, wherein the
12 securing member is wound around the load-bearing
13 rope in the opposite direction to the service cable.

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15 18 A method as claimed in claim 16 or claim 17,
16 wherein the securing member is wrapped around the
17 rope and service cable(s) only at intervals along
18 the rope.

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20 19 A method as claimed in claim 16, wherein the
21 securing member is wrapped continuously around the
22 length of the rope as it is payed out.

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24 20 A method as claimed in any one of claims 16-19,
25 wherein the securing member is tensioned as it is
26 wound around the rope.

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28 21 A method as claimed in any one of claims 16-20,
29 wherein tape is applied intermittently on top of the
30 securing member.

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1 22 A method as claimed in any one of claims 16-21,
2 wherein at least two service cables are entwined
3 with the rope before the securing member is applied.
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